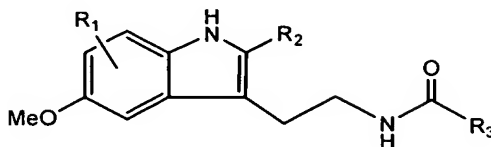


## AMENDMENTS TO THE CLAIMS

1.-36. (Cancelled)

37. (New) A compound of the formula



wherein

R<sub>1</sub> is hydrogen, halo or nitro,R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, andR<sub>3</sub> is C<sub>1</sub>-C<sub>30</sub> alkyl, C<sub>2</sub>-C<sub>22</sub> alkenyl, C<sub>4</sub>-C<sub>20</sub> aryl, OR<sub>4</sub>, SR<sub>4</sub>, NR<sub>4</sub>R<sub>5</sub>, (CH<sub>2</sub>)<sub>n</sub>OR<sub>4</sub>, (CH<sub>2</sub>)<sub>n</sub>SR<sub>4</sub>, (CH<sub>2</sub>)<sub>n</sub>NR<sub>4</sub>R or (CH<sub>2</sub>)<sub>n</sub>COR<sub>5</sub>

wherein

n is 0-10;

R<sub>4</sub> and R<sub>5</sub>, which can be the same or different, are hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkenyl or C<sub>4</sub>-C<sub>10</sub> aryl.38. (New) The compound of claim 37, wherein R<sub>3</sub> is C<sub>1</sub>-C<sub>6</sub> alkyl or C<sub>1</sub>-C<sub>6</sub> alkoxy.39. (New) The compound of claim 37, wherein R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and R<sub>3</sub> is methyl.40. (New) The compound of claim 37, wherein R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and R<sub>3</sub> is ethyl.41. (New) The compound of claim 37, wherein R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and R<sub>3</sub> is cyclopropyl.42. (New) The compound of claim 37, wherein R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and R<sub>3</sub> is cyclobutyl.43. (New) The compound of claim 37, wherein R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and R<sub>3</sub> is methoxy.

44. (New) The compound of claim 37, wherein R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and R<sub>3</sub> is ethoxy.

45. (New) The compound of claim 37, wherein R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and R<sub>3</sub> is amino.

46. (New) The compound of claim 37, wherein R<sub>1</sub> is hydrogen, R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and R<sub>3</sub> is dimethylamino.

47. (New) The compound of any of claims 38-46, wherein R<sub>2</sub> is selected from the group consisting of phenyl, 4-(fluorophenyl), 3-(fluorophenyl), 2-(fluorophenyl), 4-(chlorophenyl), 3-(chlorophenyl), 2-(chlorophenyl), 4-(methylphenyl), 3-(methylphenyl), 2-(methylphenyl), 4-(methoxyphenyl), 3-(methoxyphenyl), 2-(methoxyphenyl), 4-(ethoxyphenyl), 3-(ethoxyphenyl), 2-(ethoxyphenyl), 4-(vinylphenyl), 4-(acetylphenyl), 3-(acetylphenyl), 2-(acetylphenyl), 4-(trifluoromethylphenyl), 3-(trifluoromethylphenyl), 4-(trimethylsilylphenyl), 3-(trimethylsilylphenyl), 4-(methylthiophenyl), 4-(*tert*-butylphenyl), 4-(dimethylaminophenyl), 4-(ethylphenyl), 4-(benzoxyphephenyl), 4-(biphenyl), 2-furanyl, 2-(thiophenyl), 2-(5-methylthiophenyl), 3-(thiophenyl), 2-(indolyl), 1-(naphthalenyl), 2-(naphthalenyl), 4-(dibenzofuranyl), 1-(thianthrenyl), 2,3-(dichlorophenyl), 2,5-(dichlorophenyl), 3,4-(dichlorophenyl), 3,5-(dichlorophenyl), 2,3-(difluorophenyl), 2,4-(difluorophenyl), 2,5-(difluorophenyl), 2,6-(difluorophenyl), 3,4-(difluorophenyl), 3,5-(difluorophenyl), 3,5-(dibromophenyl), 3,5-(bis(trifluoromethyl)phenyl), 2,3-(dimethylphenyl), 2,5-(dimethylphenyl), 2,6-(dimethylphenyl), 3,5-(dimethylphenyl), 2,4-(dimethoxyphenyl), 2,5-(dimethoxyphenyl), 3,4-(dimethoxyphenyl), 2,3,4-(trimethoxyphenyl), 2,4,6-(trifluorophenyl), and 2,3,4,5,6-(pentafluorophenyl).

48. (New) The compound of claim 37, wherein the compound is *N*-(2-(2-(4-fluorophenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

49. (New) The compound of claim 37, wherein the compound is *N*-(2-(5-methoxy-2-methoxyphenyl-1*H*-indol-3-yl)ethyl)acetamide.

50. (New) The compound of claim 37, wherein the compound is *N*-(2-(5-methoxy-2-*p*-tolyl-1*H*-indol-3-yl)ethyl)acetamide.

51. (New) The compound of claim 37, wherein the compound is *N*-(2-(2-(4-*tert*-butylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

52. (New) The compound of claim 37, wherein the compound is *N*-(2-(2-(3-trifluoromethylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

53. (New) The compound of claim 37, wherein the compound is *N*-(2-(2-(4-trifluoromethylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

54. (New) A method for preparing the compound of claim 37, which method comprises reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.

55. (New) A method for preparing the compound of claim 38, which method comprises reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.

56. (New) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 37 and a pharmaceutically acceptable carrier or diluent.

57. (New) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 38 and a pharmaceutically acceptable carrier or diluent.

58. (New) The pharmaceutical composition of claim 57, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 37.

59. (New) The pharmaceutical composition of claim 58, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 38.

60. (New) The pharmaceutical composition of claim 57, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 37 and a pharmaceutically acceptable anesthetic carrier.

61. (New) The pharmaceutical composition of claim 58, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 38 and a pharmaceutically acceptable anesthetic carrier.

62. (New) A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

63. (New) A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

64. (New) The method of claim 63, wherein said administering is by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.

65. (New) The method of claim 64, wherein said administering is by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.

66. (New) A method for treating sleep disorders or chronobiological disorders in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

67. (New) A method for treating sleep disorders or chronobiological disorders in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

68. (New) A method for treating a condition affected by melatonin activity in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

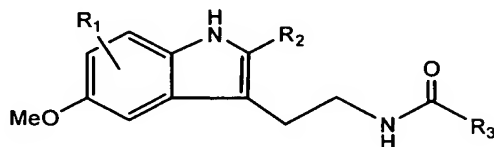
69. (New) A method for treating a condition affected by melatonin activity in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

70. (New) The method of claim 69, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.

71. (New) The method of claim 70, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune

disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.

72. (New) A compound of the formula



wherein

R<sub>1</sub> is hydrogen or halo,

R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and

R<sub>3</sub> is C<sub>1</sub>-C<sub>30</sub> alkyl, C<sub>2</sub>-C<sub>22</sub> alkenyl, C<sub>4</sub>-C<sub>20</sub> aryl, OR<sub>4</sub>, SR<sub>4</sub>, NR<sub>4</sub>R<sub>5</sub>, (CH<sub>2</sub>)<sub>n</sub>OR<sub>4</sub>, (CH<sub>2</sub>)<sub>n</sub>SR<sub>4</sub>, (CH<sub>2</sub>)<sub>n</sub>NR<sub>4</sub>R or (CH<sub>2</sub>)<sub>n</sub>COR<sub>5</sub>

wherein

n is 0-10;

R<sub>4</sub> and R<sub>5</sub>, which can be the same or different, are hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkenyl or C<sub>4</sub>-C<sub>10</sub> aryl.

This listing of claims replaces all prior versions, and listings, of claims in the application.